difficult. The patient was kept very warm, given warm water by bowel continuously and 500 CC of normal salt solution under the skin twice in each twenty-four hours. On the third day after admission, seven days after the onset of anuria, she voided 300 CC of bloody urine loaded with epithelial and blood casts. For a few days her condition appeared much improved but a very considerable amount of infection at the ulcer sites with fever developed. There was also some oozing of blood from the ulcer surfaces and bowel. She died on the tenth day after admission, the seventeenth day after taking the douche.

We were at first quite doubtful as to the accuracy of the history obtained. Careful questioning of relatives and friends failed to discover any reasonable cause for suspicion. The severity of the intoxication seems out of proportion to the amount of mercury used. The patient may have forgotten the exact number of tablets put into this particular douche.

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CASE OF ANGIONEUROTIC CURED BY INJECTIONS OF SERUM.* **EDEMA** HORSE

By FRANCIS WILLIAMS, M. D., San Francisco.

Baby Catherine—born without accident—breast feeding after the 6th month supplemented with fruit juice, broths, crusts, etc. Weight, general development, and teething normal to 10th month, time of attack.

Family history of interest. Father 6 weeks prior became violently insane and was committed to Agnews—had a similar attack earlier in life. The quality of the breast milk may have been affected

by worry and excessive work on the mother's part.

History of attack. July 8th, '12, a sudden onset
of rather purpuric edema caused marked swelling of both feet and legs below the knees with rectal temperature between 102° and 104° F. Tentative diagnosis was purpura rheumatica and appropriate treatment was instituted. In rapid succession the hands, forearms, forehead and side of face swelled, but the face lesions were free of purpura. Because of the subcutaneous hemorrhagic marks plain serum 10 cc. was given 3 times between July 12th and 16th; the purpuric lesions disappeared, there was slight febrile abatement, but the edema persisted in the lower limbs and moved slowly over face, scalp, and neck, fortunately avoiding the glottis, but closing the eyes at times.

Case was referred to Drs. H. D'Arcy Power and Howard Morrow by whose courtesy the diagnosis of angio-neurotic edema was made. The massive edema, the purpuric element, and the high fever made necessary a differential diagnosis between purpura rheumatica and purpuric angio-neurotic edema. The child was given large doses of citrate of sodium, the gastro-intestinal tract cared for dietetically and medicinally, and a skin lotion applied. The condition remained stationary with continued fever, and by the end of the month purpuric areas again appeared in the edematous lower limbs

and about the neck. A final injection of 10 cc. normal serum was given, though 15 days had elapsed and anaphylaxis was considered a possibility. Recovery was immediate, the following day the temperature was normal, in 48 hours edema was absent and has not returned since.

By way of summary we have then this picturea child with paternal neurotic parentage, nutrition normal to the 10th month, suddenly develops persistent marked purpuric edemas, with remitting fever resisting anti-rheumatic alkaline, and intestinal antiseptic treatment—given three 10 cc. doses normal serum with slight relief, but promptly relieved by a final dose of serum given 15 days later. Unfortunately no blood count was made—a mild degree of anemic appeared to exist a mild degree of anemia appeared to exist.

Interesting observations include absence of any mucous surface hemorrhages such as characterize purpuras or hemophilia; the fever dependent possibly upon blood disintegration or possibly upon autointoxication of intestinal origin; the food sufficient in quality may have been disturbed by maternal worry and possibly too much table feeding; but most suggestive is change of a purpuric character in the blood of a child angio-neurotic through neurotic parentage; the efficiency of the normal serum argues favorably for such a view. And the efficiency of the final dose after a 15-day interval causes further reflection upon the possibility of a mild degree of anaphylaxis being a factor, at any rate I believe this accidental spacing of the final dose rendered it more effective than it promised to be if grouped with the first three injections.

Discussion.

Dr. L. Eloesser: Dr. Isnardi asked me to see a case with him about a month ago, in which he had used horse-serum. He had circumcised an apparently normal baby four days old. Oozing from the wound had lasted all day, and when I saw the baby in the afternoon the dressings were soaked with blood that showed no vestige of a clot. Dr. Isnardi had used horse-serum. This seemed to stop the bleeding for a few hours, but had no perma-nent effect. I helped him transfuse blood from the radial artery of the father into the popliteal vein of the child. After the transfusion the bleeding stopped permanently and the child has developed normally since.

Dr. L. I. Breitstein: I would like to report a case of a pregnant woman in her 6th month who developed urticarial wheals, scattered irregularly over her face, abdomen, back, and extremities. These wheals varied in size from a pea to that of o dollar. The urine showed a measurable amount of albumen with a marked diminution of urea. We looked on these symptoms as manifestations of a toxemia of pregnancy. Human blood serum, taken from a normal healthy pregnant woman, was administered. To our surprise, we got immediate results, the trouble clearing up within 24 hours. Altogether 50 cc. of human blood serum was given hypodermically in the 24 hours.

Dr. Francis Williams, closing discussion: There is a large group of these affections that seem to have a relationship which is hard for us to es-tablish. When the purpuric element comes into it, it seems to suggest the use of serum in some

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Senate Bill No. 813.

INTRODUCED BY SENATOR AVEY. January 27, 1913.

Referred to Committee on Public Health and Quarantine.

AN ACT To Regulate the Examination of Applicants for License, and the Practice of Those Licensed, to Treat Diseases, Injuries, Deformities, or Other Physical or Mental Conditions of Human Beings; to Establish a Board of Medical Examiners, to

^{*} Read before the San Francisco County Medical Society, October 1, 1912.